

W5YI

America's Oldest Ham Radio Newsletter REPORT

Up to the minute news from the world of amateur radio, personal computing and emerging electronics. While no guarantee is made, information is from sources we believe to be reliable.

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The Ten NPRM Questions The FCC Wants Answered!

There appears to be a lot of minor errors in the FCC's *Notice of Proposed Rulemaking* which looks toward restructuring the amateur Service. When we questioned the FCC on them we were told that they were aware of some and which would be corrected in the version that is printed in the Federal Register. "The questions we want answered are correct in the original version," we were told.

It is our opinion that the errors crept in during the revision phase. The FCC staff originally submitted a straight *Notice of Proposed Rulemaking* which was later returned by the Commissioners for amendment. The result was what amounted to a combination NPRM and NOI, *Notice of Inquiry* -- a solicitation of comments on certain items.

Here is a list of the questions that the FCC wants answered concerning the Amateur Service:

1.) Are six classes of licenses unnecessary?

The FCC believes that reducing the number of classes of operator licenses would relieve the VEs from the tasks of preparing and administering unnecessary examinations. It would also ease the Commission's burden of providing oversight of the system and maintaining a database of the current operator class for every amateur operator. In short, how many license classes do you believe should be in the U.S. Amateur Service, and why?

The FCC has proposed four, Technician, General, Advanced and Extra. There is mounting support for three: Technician, General and Extra. The ARRL wants four: A, B, C and D which would basically coincide with Extra, Advanced, General and Technician.

2.) How important is the Novice Class?

Very few people now take the examinations for the Novice class license. Over the past ten years., the number of Novice operators has declined from 84,589 (in 1989) to 76,515 (in 1998). By contrast the number of codeless Technicians has gone from zero to 184,979.

The FCC "...believes that the no-code Technician Class operator license has replaced the Novice Class operator license as the entry-level license class of choice. Therefore, we tentatively conclude that the Novice Class operator license no longer serves a significant, useful purpose and should be phased out with the current holders of Novice Class operator licenses being grandfathered. No new Novice Class licenses would be granted, but anyone currently holding licenses would be able to modify or renew them. In addition, Novice Class operators would be eligible for examination credit for the telegraphy requirement of any license class. [Editors note: This appears to be one of the errors in the amended version giving credence to the view that

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the FCC originally proposed only one telegraphy examination speed: 5 words-per-minute.] We seek comment on this proposal."

3.) What should be the disposition of the Novice bands?

Currently, other licensed classes can operate within the Novice bands, but only at a 200 watt reduced power level. Given the small number of new Novice licenses now being issued, if the FCC were to discontinue licensing new Novices, would it be appropriate to delete the frequency limitations on Novices and the power limitations on other classes of operators using the Novice frequencies. The FCC suggested that "...Novices would continue to be limited to 200 watts output power but could operate using the Morse code anywhere within the 80, 40, 15 and 10 meter bands?"

4.) Should the Technician Plus license class be phased out?

The only difference between the Technician and Technician Plus Classes is that a Technician Plus operator has passed a five words per minute (WPM) Morse code examination has not. The FCC believes that both operator classes predominantly use FM voice and digital packet communications on the amateur VHF and UHF bands. "Yet, the VEs are burdened with preparing and administering telegraphy examinations, and the Commission is burdened with processing the resulting applications and revising the database."

The FCC proposed "...that the Technician Plus Class be phased out. Holders of a FCC-issued Technician Class operator license granted before March 21, 1987, have previously passed the written examination required to qualify for a General Class operator license."

"Other Technician Plus Class operators could qualify for a General Class operator license by passing written examination Element 3(B) which consists of thirty questions on the additional privileges of a General Class operator license and the 13 or 20 wpm telegraphy examination. We seek comments on this proposal."

It should be pointed out that, according to the NPRM, the 5 wpm code examination would still be available and any Technician who wanted to operate CW on the HF Novice bands could do so after passing Element 1A and obtaining a CSCE.

5.) Should Advanced Class operators be permitted to be VEs for the General Class?

Currently, an Advanced Class operator cannot prepare or administer a telegraphy examination for an examinee for a General Class license. Only an Amateur Extra Class licensee can administer that examination. The

ARRL has petitioned the FCC requesting a rule amendment to permit Advanced Class operators who are VEs to prepare and administer examinations for a General Class operator license. The ARRL says that this is legal under the law and will help fulfill the need for more volunteer examiners. "We agree, and therefore propose to authorize Advanced Class operators to prepare and administer examinations for the General Class operator license. These proposals will benefit potential amateur service licensees by having additional volunteer examiners available for the examinations. We seek comment on this proposal."

6.) Should RACES station licenses be phased out?

No new RACES (Radio Amateur Civil Emergency Service) station licenses have been granted since July 14, 1980 when they were discontinued to conserve FCC manpower and resources. At the time, there were 611 RACES licenses. There are now only 249 RACES licenses. The FCC wants to phase out RACES station licenses by not renewing them.

By eliminating the RACES licenses, the FCC is taking a step, which not only will conserve the Commission's financial resources, but will also eliminate licensing duplication. Emergency communications that are now transmitted by RACES stations can continue to be transmitted by all regular amateur radio stations.

The FCC said "Our rules permit two types of stations to operate as part of RACES: (1) a licensed RACES station, and (2) any amateur station that has been properly registered with a civil defense organization. Thus, to engage in RACES communications, it is not necessary to have a RACES license with a separate and distinct call sign. We invite comments on this proposal."

7.) How can the Amateur Auxiliary improve enforcement of the Amateur Service rules?

The Amateur Auxiliary is composed of amateur operators who are recruited and trained by the Commission for the purpose of detecting, on a voluntary and uncompensated basis, improper radio transmissions. This information is conveyed to the Commission. Advisory notices are issued to persons who apparently have violated the Amateur Service rules. According to the FCC, the procedure suggested by the ARRL which would permit the volunteers to bring complaints of malicious interference directly to the Chief Administrative Law Judge (CALJ) is not legally possible.

The FCC said that "...while we do not seek comment on ARRL's specific proposal, we do seek comment, consistent with the ARRL's underlying concerns, on other ideas for improving our enforcement processes as they relate to amateur radio. One possibility, for example, would be to encourage or require persons bringing

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complaints of interference to the Commission to include a draft order to show cause to initiate a revocation or cease and desist hearing proceeding. We also request additional comments and suggestions on how we could better utilize the services of the Amateur Auxiliary, consistent with its statutory basis."

8.) What changes should be made to the telegraphy examination requirements?

The FCC rules provide for three levels of skill in telegraphy, based upon the rate at which an applicant correctly receives a telegraphy message: five, thirteen and twenty words-per-minute (wpm). The VEs determine the examinee's level of skill in sending and receiving text in the international Morse code.

In 1990, in response to the sentiment of the amateur community, the FCC established a codeless Technician Class operator license in order to attract technically inclined persons. The FCC stated that they "...believed that telegraphers would be in less demand than electronics and communications experts."

"An entry-level opportunity was provided to otherwise qualified persons who found that telegraphy was a barrier to pursuing the purposes of the amateur service. Those purposes include encouragement and improvement of the amateur service by providing opportunities for advancing both communication and technical skills, and the expansion of the existing reservoir within the amateur radio service of trained operators, technicians and electronics experts."

Manual telegraphy is now used less as a communications mode. Radiotelegraphy is just one facet of many diverse modes of radiocommunication that require a technologically literate licensee."

"The international *Radio Regulations* that apply to the Amateur Radio Service require that all amateurs licensed to operate below 30 MHZ demonstrate their ability "...send correctly by hand and to receive correctly by ear, texts in Morse code signals."

The *Radio Regulations* do not specify any particular speed. We note that the 1995 World Radiocommunications Conference (WRC-95) resolved that Article S25, which includes the international amateur code requirement, be considered at the 1999 WRC. Subsequently, this consideration was delayed to the WRC scheduled for 2001."

Based in part on an ARRL survey, an ARRL committee proposed to reduce the General Class code speed requirement from 13 to 10 wpm, and for all code examinations to specify one out of five minutes of copy.

"In view of changes in the technologies that amateurs use to communicate generally, and views with regard to the Morse code requirement specifically,

- (a.) We seek comment on all aspects of the Morse code standards used in our examinations.
- (b.) Do the three levels of 5, 13, and 20 wpm remain relevant to today's communications practices?
- (c.) Should we continue to have three different levels, or should these be reduced to one or two -- and, if so, what should be the required speeds?
- (d.) Were we to reduce the required Morse code elements, should we add elements to the written examination to ensure a working knowledge of the newer digital technologies, which, in part, are replacing the Morse code?
- (e.) Or, should we consider specifying the method of examining for Morse code proficiency, such as requiring fill-in-the-blank or copying one out of five minutes sent, instead of allowing VEs to determine how to test for code speed?

We request comment on these and any other issues related to our code speed requirements."

9.) Should the code speed be reduced to 5 wpm for everyone as a way to eliminate the need to grant waivers of the higher code speed requirements for the handicapped?

The ARRL asked that the rules be changed to allow telegraphy examination credit for the higher telegraphy speeds to examinees with a disability. The League wanted the applicant to be required to attempt the higher-speed telegraphy examination before examination credit is given pursuant to a doctor's certification and volunteer-examiner coordinators (VECs) would be authorized to request medical information from the certifying physician pertaining to the examinee's disability.

The FCC added "It should be noted that these issues only remain relevant if we retain the higher telegraphy speeds requirement, since if the requirement were eliminated, a person with a disability would not have to apply for examination credit. We tentatively conclude that, if we do maintain the requirement, neither of these proposals is an appropriate means to address potential abuses of the physician certification requirement. We believe that these proposals place an unfair burden on examinees with disabilities, and raise serious privacy and confidentiality concerns. We seek comment on ARRL's proposal and our tentative conclusion."

10.) What changes, if any, should be made to the written examinations?

There are currently five different written examinations prepared and administered to applicants for amateur operator licenses in order to demonstrate to the FCC that

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CUTTING EDGE TECHNOLOGY

■ When winds hit an electric power line in just the right way, a mechanical vibration at the cable's resonant frequency causes it to physically move up and down. Power-line engineers call this phenomenon "galloping conductors." If the cable's oscillations become too powerful, it can snap and fall to the ground. Wind-tunnel tests prove that a cable with an oval cross-section, rather than round, presents less wind drag. Oval conductors are already on the market.

■ One of the main enemies of electronic circuitry is corrosion. Humidity and salt air rapidly eat away anything made out of metal, unless it is protected in some way. A new device is now on the market that, when installed inside a computer, emits a chemical that deposits itself upon the electronic components. It promises to prevent corrosion for up to two years.

■ In an effort to conserve battery power, engineers are using phosphorescent additives in backlit liquid-crystal displays. Just 30 minutes of exposure to light can provide several hours of sufficient glow to illuminate watch displays, mobile phones and small toys.

■ Engineers are working on using the visible light spectrum to allow satellites already in orbit to communicate with each other. This lightens the load on the ground controllers, saves power, and there is no atmosphere to interfere with the signal. Laser beams and infra-red light use frequencies high enough to provide extremely high data rates, and there is no need to obtain a license from the FCC or the ITU.

■ Fingerprints are not always reliable as a means of identification. Some people have lighter ridges on their fingertips, making them difficult for computer scanners to read. A few fingerprint-recognition programs don't take into account those who are missing a digit, and repeatedly insist upon the user inserting a finger that doesn't exist into the scanner! This is why many companies are switching to iris recognition. The iris of the eye never changes, except in size when light strikes it. New algorithms scan the human eye and automatically adjust for pupil size, whether eyeglasses or contact lenses are

used. It also determines if the eye is alive or not.

■ How far have automated teller machines (ATMs) permeated our economy? Try the high seas. There are now ATMs installed and available for use by sailors aboard two U. S. Navy aircraft carriers.

EMERGING COMMUNICATIONS

■ There is projected to be 400 billion minutes of telephone activity in the U.S. in 1998. That's 25 hours annually for every American person ...nearly 3 days for every U.S. household.

■ CQ QRM! Japan is saturated with mobile phones, much to the displeasure of people in hospitals, schools, movie theaters, museums, high-end restaurants ...even on airliners. In an attempt to get people to shut off their phones in public places, the Japanese government may soon legalize small, low-power jammers on mobile-phone frequencies. These cigarette-pack-size units with flip-up antennas may be offered for sale to business owners, under controlled conditions. The Wave Wall, made by a company called Medic Inc., costs about \$480. Battery-operated, they can be used anywhere. The Wave Wall is already being offered in Europe and it is only a matter of time before they hit our shores. The potential for abuse is immense! A photograph is available at: <http://www2s.biglobe.ne.jp/~chiyoda/>

■ The FCC requires all cellular telephones, by the year 2001, to give their location to within 125 meters whenever they dial 911. This will help emergency workers find callers who need help and don't know where they are, or are unable to speak legibly.

■ Motorola is branching out into the consumer TV set-top box business! The "big M" will announce its new TV interface box in mid-September at the International Broadcasters Convention in Amsterdam. The box will offer computer and broadcast television programming, telephone service, high-speed Internet access/browsing, e-mail, movies-on-demand, electronic commerce ...and more! It will be a major introduction. Motorola is entering a new product line to offset declines in its semi-conductor and cellular phone business.

COMPUTERS & SOFTWARE

■ iMac-ulate conception! The introduction of Apple's new jazzy iMac computer has been outrageously successful! Over 200,000 have already been sold.

■ An exceptionally well-rendered drawing of 1940's movie actress Hedy Lamarr appears on the cover of the latest version of Corel's popular Corel-Draw computer software. Look closely; at first glance you'll swear it's a photo. Ms. Lamarr (still alive, perhaps to Corel's surprise) is suing the company, alleging that they used her name and likeness without her permission. In her youth Ms. Lamarr came up with the idea of using split-second, frequency-hopping radio transmissions to control torpedos by remote control, for which she was granted a patent in 1942. This spread spectrum technique today controls cellular telephones.

■ Eleven European countries are adopting a shared monetary system. The new unit is called the "euro," and you will see it appearing in computers very soon. The symbol for the euro looks like the letter "c," with two horizontal lines through it. This never-before-seen symbol is causing software companies to scramble in order to accommodate the euro in word processors, spreadsheets, printers and monitors. The euro may rival the U.S. dollar as the world's main reserve currency, because those who use it will account for almost 20% of the world's gross domestic product. The euro will debut on January 1, 1999.

■ Computer hardware and software has a very short lifespan! Today, more equipment is replaced due to obsolescence rather than device failure. And Windows-based software has so thoroughly dominated the computer industry that many software companies are letting their old DOS-based programs die on the vine; they no longer offer technical support or DOS-based upgrades for them.

■ If the possibility of airport X-ray machines erasing computer data worries you, try storing it on optical disks. X-rays won't affect them, nor will magnetic fields. Optical disks can't be damaged by spilled coffee or soft drinks. Just don't sit on them! They break.

■ Take a very good look at your

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television screen the next time you watch a baseball game. If you think that the advertising signs on the walls behind the batter change from inning to inning, you're right. They are changing. But there is nothing to paint, no sheets to unroll or boards to nail up. The signs are completely electronic; they exist nowhere but inside a computer's memory somewhere. What the fans at the ballpark see are just blank walls. Computers take live video and "paste" the ads to the walls. These "virtual" signs will appear in football telecasts; some may include animation. Since the signs can change at a keystroke, networks can charge more money to accommodate more advertisers in one time slot.

■ Within six years, engineers should reach the theoretical maximum limit of magnetic storage capability -- 40 to 70 gigabytes per square inch. The laws of physics won't let you store more than that unless you drop the temperature to the cryogenic level. The current maximum storage amount is about 10 gigabytes per square inch.

■ New notebook computers allow the battery to communicate directly with the system software. The battery sends data about its voltage, temperature and expected time left until recharge. The operating system reads this information and alerts the user to a needed shutdown.

INTERNET NEWS

■ Internet usage is skyrocketing! According to Nielsen Media Research - the radio/TV rating folks - the number of Americans over age 16 using the Internet is increasing at the rate of 2 million a month! Nielsen estimates that 70.2 million U.S. adults (40.1 million men and 30.1 million women) now access the Internet in some way with the largest increases coming among minority groups. The Nielsen Report estimated 5.6 million African-Americans (a 53% increase since the beginning of the year) and 868 thousand American Indians (a 70% increase) use online services. The study also found that 44 million Americans (twice as many men as women) use the Web to make purchases or compare products. Who uses the Internet the most? Young people between the ages of 16 and 24! (70% of all young males and 51% of females.)

Which racial group? Asian-Americans (58% of all men and 38% of women.) 36% of whites are online, 24% of blacks.

■ The Internet now carries more messages than the U.S. Postal Service carries letters.

■ Many Internet users are turning to low cost or free "Ad Blockers" to speed up Web use. Those little graphic ad banners at the top, sides and bottom of your screen take time to load. Most blocking programs have been written by computer enthusiasts and carry such names as "AdWipe", "Junk Busters" ...and "InterMute." These programs generally display all other text and graphics.

■ Priceline.com - the "name-your-own-price" Website - is deadly serious about its future! They have hired a former Citicorp president as its new CEO, been awarded a U.S. patent on their e-commerce system and have obtained another \$20 million in financing.

■ So-called VON (voice-over-net) long distance phone companies using the Internet are springing up! Colorado-based ICG Communications has begun offering 6¢ per-minute LD service in 30 cities nationwide. They will expand to 166 markets by year end. Qwest Communications (Denver) charges 7.5¢. And A+Net (a San Diego ISP) charges only 1¢ per minute to its subscribers!

■ The Rich-Get-Richer Department. Microsoft is now turning to the used car business. For one thing, it is a bigger market. Only 6% of the 45 million new and used cars sold this year will be sold over the Internet. CarPoint (a Microsoft commerce website) says that by the year 2000, 24% of all vehicles will be bought over the Internet. That's a \$500 billion sales potential!

WASHINGTON WHISPERS

■ The Dept. of Justice is looking into a possible "anti-competitive conspiracy", "abuse of monopoly power" and collusion between Microsoft and Intel. There are rumors that Bill Gates tried to influence Intel Chairman Andrew Grove to do things his way. Depositions have already been taken by state and federal investigators. Microsoft apparently got into a dispute with Intel about soft-

ware they developed or wanted to develop which conflicted with Microsoft plans.

■ Video transmission standards around the world are a mess. British TV uses negative modulation, the French use positive. Germany uses negative modulation, but transmits on different frequencies from the British. There are three main television transmission systems in the world: NTSC, PAL, and SECAM, but each varies from one country to another.

■ One of the many reasons some people try to disable their electric meters is to hide other illegal activity. Growing marijuana plants indoors requires high-intensity lamps, which of course consume large amounts of electricity. The power company might notice and wonder why this particular house draws more current than any other on the block. While home electric meters might be bypassed, the electrical distribution system for the neighborhood can't be. Excessive current causes transformers to heat up, and workers spot this and quickly find out why.

■ My Bonnie Lies Over The Ocean Dept. -- During hurricane Bonnie, the National Oceanic and Atmospheric Administration's home page on the Internet received so many visitors (over 1 million daily) that officials had to temporarily direct users to other sites. Weather enthusiasts tracking the storm overloaded NOAA's web site for a time.

■ FCC raids, shuts down 15 Miami-area pirate FM broadcast radio stations. A coordinated effort involving the FCC, U.S. Marshals, U.S. Customs, the Drug Enforcement Administration, U.S. Coast Guard, the United States Attorney's Office, and local law enforcement officers has resulted in the closing down of 15 unlicensed broadcast stations. Their equipment was confiscated. Most seizures took place between July 27 and 31, 1998.

The stations had been operating illegally all across the FM broadcast band (On 89.1, 91.7, 95.3, 97.7, 99.5, 104.1 in Miami; 88.7 and 94.5 in North Miami; 90.3 and 90.9 in Homestead; 92.7 and 101.1 in Coconut Grove; and 107.1 in Miami Beach, 90.9 in Davie and 104.7 in Hialeah.) The action was part of the FCC's recently stepped-up enforcement efforts against unlicensed broadcast stations.

The types of equipment seized ranged from homemade transmitting components

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to professionally manufactured equipment illegally imported from foreign countries.

The FCC said, "Both the homemade components, and the illegally imported equipment, which is not authorized for use in the United States, have the potential to cause serious interference problems to several types of licensed communications, including vital aviation and other public safety frequencies." The equipment seized included two 2,000 watt transmitters.

Operators of pirate broadcast stations are subject to fines of up to \$11,000 per violation and seizure by court order of their radio equipment. They could also be subject to criminal fines up to \$100,000 and one year in prison, or both, for a first time offense.

In Tampa, Florida, convicted pirate broadcaster Arthur L. Kobres, K4FWJ was sentenced to six months house arrest and fined \$7,500 for broadcasting without a license. His FM equipment was seized from his home in neighboring Lutz, Florida by federal agents last fall.

AMATEUR RADIO

■ **Is "Incentive Licensing" coming to the United Kingdom?** The Radio Society of Great Britain released the following policy statement on July 25, 1998 to their membership. It was entitled:

The Future of Licensing

The Council [Board of Directors] of the RSGB has agreed to progress discussions with the Radiocommunications Agency [their radio regulatory agency] on the future structure of licensing, following the likely withdrawal of Morse as an international requirement for HF amateur bands access at a future World Radio Conference. The background to the Society's current thinking (and on which it is engaged in an extensive period of consultation with interested parties) is as follows.

The Amateur Service, as an activity regulated by international treaty, enjoys a unique place in the array of activities and pastimes available. Over the decades, amateur radio has been a route into professional careers in high technology, and has also served the national interest through providing emergency communication facilities in times of disaster. Radio amateurs have also been instrumental in numerous innovations in the world of radio communication and related topics.

Amateur radio has proved its value to

society, and is continuing to do so. It also represents a fulfilling and stimulating hobby for many tens of thousands of UK residents, and several million people across the world.

The environment in which amateur radio exists is, however, in rapid change. The impact of the Internet and the universal availability of land and mobile-based telecommunications has reduced the "aura" of instant world-wide communication through amateur radio. The range of modes of transmission available to radio amateurs has expanded significantly in recent years and many amateurs now use modes unheard of a decade or two ago.

Yet throughout all this, the UK qualifications for obtaining an HF bands amateur radio licence have remained relatively unchanged. The three components of technical competence, knowledge of license regulations and ability to send and receive Morse code have been the core elements of such qualifications for some 50 years.

The original requirement for Morse code seems to have stemmed from three sources:

- a) The fact that Morse was a prime transmission mode half a century ago
- b) The need for a "lingua franca" to allow commercial stations to ask amateur radio stations to close down should they be causing interference
- c) The fact that Morse made communications possible across language barriers.

Today, Morse is but one of many modes used by radio amateurs. Furthermore, commercial stations have virtually withdrawn the capacity to transmit in Morse, and it is now extremely unlikely that any case of interference would be addressed by a request, sent in Morse code, to cease transmitting.

The appropriateness of Morse code as a pre-requisite to gaining access to the Amateur HF bands is therefore open to question. The Society's understanding is that at a future World Radio Conference, national administrations will find it hard to argue for retaining the current international agreement that Morse competence shall be universally required for HF band operation by radio amateurs. Indeed some countries have already reduced this requirement to nominal levels and others are actively considering it.

For it to continue to attract the younger generation, amateur radio should

be seen as a progressive, exciting and forward looking hobby.

The Society believes that Morse can no longer be justified as a relevant precondition for access to the HF bands in the longer term. However, it will continue to exist as an important mode for radio amateurs, and in this regard, the Morse segments of the HF amateur bands must be preserved.

The Way Ahead

The Society does not believe that Morse can simply be abandoned as part of the qualifications for an amateur HF license without a more general review of the overall licensing structure and qualifications required for amateur licences. This review should have the following objectives:

- To maintain or improve standards
- To make Amateur Radio more accessible in an environment where hobbies that compete for the attention of those who might become radio amateurs are easier to access
- To encourage self training and improvement
- To meet international compatibility standards (CEPT etc)

The Society believes that these objectives might, in due course, best be met by a structure of progressive (sometimes called "incentive") licensing.

As an immediate action, the Society is consulting with its members and the wider amateur radio community in the UK on the details of these proposals. At the same time, it is seeking confirmation that proposals along the above lines would be favorably considered by the Radiocommunications Agency.

Summary

The Society's current view is that the structure of amateur radio licensing in the UK should, in due course, be amended to a system of progressive or incentive licensing, thus making a range of facilities available based on a combination of qualifications in the following areas:

- Technical knowledge and skills
- License regulation knowledge
- Operating skills

As an interim step, the Society is entering into discussions with the RA to develop a new category of licence, requiring limited Morse capability, which would allow restricted privileges on HF bands.

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AMATEUR RADIO STATION CALL SIGNS

...sequentially issued as of the first of September 1998:

Radio District	Group A Extra	Group B Advanced	Group C Tech/Gen.	Group D Novice
0 (*)	AB0HW	KI0NZ	(***)	KC0EBZ
1 (*)	AA1TZ	KE1KG	(***)	KB1DZE
2 (*)	AB2FN	KG2OX	(***)	KC2EAH
3 (*)	AA3RO	KF3CB	(***)	KB3CZM
4 (*)	AF4LR	KU4UN	(***)	KF4ZYN
5 (*)	AC5RF	KM5SM	(***)	KD5FDC
6 (*)	AD6GN	KQ6XM	(***)	KF6SQT
7 (*)	AB7YX	KK7PN	(***)	KD7CRE
8 (*)	AB8DD	KI8GS	(***)	KC8KWK
9 (*)	AA9WL	KG9OH	(***)	KB9TIH
N. Mariana	NH0F	AH0BA	KH0HE	WH0ABJ
Guam	(**)	AH2DH	KH2TR	WH2ANX
Hawaii	NH7L	AH6PN	KH7NY	WH6DEU
Am. Samoa	AH8R	AH8AH	KH8DM	WH8ABF
Alaska	AL0M	AL7RG	KL0QD	WL7CUW
Virgin Isl.	(**)	KP2CN	NP2KE	WP2AIJ
Puerto Rico	NP3Y	KP3BK	NP3YG	WP4NNX

* = All 1-by-2 & 2-by-1 call signs have been assigned.

** = All 2-by-1 call signs have been assigned.

*** = Group "C" (N-by-3) call signs have now run out in all radio districts. (Group "D" now being assigned.)

Note: New prefix numerals now being assigned in Puerto Rico (KP3/NP3), Hawaii (AH7/KH7) and Alaska (AL0/KL0)

[Source: FCC Amateur Service Database, Washington, DC]

NEW AND UPGRADING AMATEUR STATISTICS

For the Month of August 1996, 1997 & 1998

License Class	New Amateurs			Upgrading Amateurs		
	1996	1997	1998	1996	1997	1998
Novice	52	42	60	0	0	0
Technician	1632	848	928	0	2	0
Tech Plus	130	87	136	316	233	228
General	15	7	22	289	259	191
Advanced	3	2	4	232	232	166
Extra Class	5	1	1	176	145	129
Club/Empty	59	54	40	0	0	0
Total:	1896	1041	1191	1056	981	714
Decrease:	(33.1%)	(45.1%)	+14.4%	(17.8%)	(22.2%)	(27.3%)

Questions: Continued from Page 3)

the applicant possesses the operational and technical qualifications required of an amateur service operator.

The written examination for each license class currently specifies nine or ten general topics and the number of questions for each topic that must be asked in an examination. Each written examination is prepared from a pool of multiple-choice questions and answers that is approved by the National Conference of VECs. Each question pool is updated on a four-year cycle and all

publishers and applicants have access to current questions. The VECs Question Pool Committee (QPC) without formal Commission involvement accomplishes this on a purely voluntary basis.

"Determining the components of written examinations was carried over into the VE system from those components used when the Commission previously prepared and administered the examinations. We seek comment on whether the written examination requirements should be modified to provide VEs and VECs additional flexibility in determining the specific contents of written examinations, on the specifics of what such flexibility should entail, and on the advantages and disadvantages to providing such flexibility."

In short, the FCC wants to know whether the general topics set forth in Section 97.503 adequately covers the needed information categories relevant to determining whether an applicant has the qualifications necessary to become an amateur licensee.

"For example, does the current list of topics adequately cover current technology and contemporary amateur operating practices? For those commenters who suggest addition or deletion of general topics, we ask them to include the rationale underlying such proposals. In addition, we ask commenters to discuss whether the required number of questions from each general topic should continue to be established by rule. For those commenters who suggest altering the number of questions, we ask that they discuss alternative numbers or percentages and the reasons therefor."

The FCC said they were particularly interested in comments from VEs and VECs regarding any changes they would recommend in the written examination requirements, as well as on the amateur examination process specifically, including how, if at all, they will affect the integrity of the examination and licensing process. "For instance, we seek specific comment from VEs and VECs regarding how modifications to the written examination requirements would affect their ability to conduct examinations in an effective, efficient and expeditious manner."

Heading and outline of your comments

The heading of your Comments or Reply Comments should look like the following example. It can be on your letterhead or plain paper.

Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of)	WT Docket 98-143
1998 Biennial Review)	RM-9148
— Amendment of Part 97)	RM-9150
of the Commission's)	RM-9196
Amateur Service rules.)	

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To: Federal Communications Commission

COMMENTS OF:

I: INTRODUCTION

I (or your organization, association or company - name and address) file these comments on (date) in the FCC's Notice of Proposed Rulemaking, WT Docket No. 98-143. (It is often best to start with a summary of your comments, then follow with the details, explanations and other pertinent information.

Tell the Commission who you are and your credentials (why you are qualified to comment on the document.) Your comments should state your specific interest and clearly present your position and facts. The comments may be more than one page. Be sure your name and rule making or docket number you are referring to appear on each page.

Comments may be any length, but if they exceed ten pages, a table of contents and a summary at the beginning is required. Formal comments must be typed (double spaced) on 8½" by 11" paper size with 1" margins. You may want to include one or more of the following section headings in your comments:

- II: Number of Amateur Service License Classes
- III: Importance and Disposition of the Novice Class
- IV: Advanced Class VEs for the General Class
- V: Phasing out RACES Station Call Signs
- VI: Enforcement in the Amateur Radio Service
- VII: Telegraphy Examination Requirements
- VIII: Written Examination Requirements
- IX: CONCLUSIONS

Be sure to sign and date the document.

Respectfully submitted by:

(Signature)

Typed Name

Address

Date

IMPORTANT: Be aware that, effective with this proceeding, there is a new procedure for filing comments on FCC rulemaking. Here is the story on how this works!

ELECTRONIC FILING OF COMMENTS IN FCC RULE-MAKING PROCEEDINGS AND ACCESS TO FILINGS

Two years ago, the FCC proposed to allow electronic comments to be filed in FCC rulemaking proceedings, using the Internet's World Wide Web and electronic mail. In making this recommendation, the Commission noted that an estimated 40 million people in the United

States now have access to the Internet. Allowing parties to use the Internet and electronic mail to file comments in FCC proceedings makes it simpler for people to submit comments to the Commission and permits them to be quickly made available for review on-line.

Previous rules required the filing of multiple copies of formal comments to the Secretary. If comments are filed electronically, parties generally need only to submit one electronic copy, which is automatically distributed to the appropriate Bureaus and Offices, as well as the copy contractor, in electronic form.

Electronic Comment Filing System (ECFS)

In order to implement the changes mandated by the *Telecommunications Act of 1996* to serve the public more quickly and efficiently, the Commission is expanding the use of electronic filing in FCC proceedings. As part of its commitment to take advantage of new information technologies, the FCC has implemented a new Electronic Comment Filing System.

ECFS will not only make it much easier for the public to participate in the rulemaking process, it will also increase the efficiency of the FCC operations. By making it simpler to submit comments, the Commission expects greater and more diverse public input. Electronic filing will lower the costs of filing comments because parties will no longer have to file multiple paper copies and arrange for mailing.

As of July 1998, electronic filing is now being permitted in most *Notices of Proposed Rulemaking*, *Petitions for Rulemaking*, *Notices of Inquiry rulemaking*, and *Petitions for Reconsideration*.

The objective of electronic filing is to make it easier for the public to file comments and to access those filed by others. The public will no longer have to rely on paper copies accessible through the FCC reference room or copy contractor.

Commenters, however, still have the option of filing comments on paper if they so desire. Electronically filed comments will receive the same treatment and consideration as comments filed on paper. The ECFS will also accept ex parte filings in these proceedings, including the summaries of oral ex parte presentations.

The new system is being monitored and evaluated to determine whether there is any need to make modifications and whether or not all future pleadings should only be accepted by electronic filing. In any event, ECFS is now the official system of record for the FCC.

How to Use the ECFS

The *Electronic Comment Filing System (ECFS)* is currently available in proceedings specifically designated by the Commission. The Amateur Restructuring NPRM

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(WT Docket No. 98-143) has been so designated and is the first Amateur Service proceeding using the new electronic comment procedure.

The primary mechanism for electronic filing of formal comments is a World Wide Web page form through which parties may upload their comments directly into a database or input brief comments.

You can access the ECFS Home Page at URL: <<http://www.fcc.gov/e-file/ecfs.html>>. By accessing a hyperlink, the Web page allows commenters to use the same system to search for, view, download and print comments filed in a proceeding.

NPRM Comment Date

Interested parties may file comments on WT Docket N. 98-143 on or before **December 1, 1998** and reply comments are due by **January 15, 1999**.

Ideally, comments should be filed using the Commission's Electronic Filing System. Comments filed through the ECFS are sent as an electronic file via the Internet from: <<http://www.fcc.gov/e-file/ecfs.html>>.

The ECFS has been designed to accept filings created in the following major word processing formats -- Microsoft Word, WordPerfect, Adobe Acrobat, and ASCII text -- as well as Microsoft Excel for spreadsheets. These formats represent the overwhelming majority of the market today, and virtually every other word processor will export files in these formats.

For viewing and printing, the ECFS will automatically convert files into Adobe Acrobat Portable Document Format (PDF) so that users can access the formatted files even if they do not have the word processor used to create the document.

Sending in comments electronically to the FCC is a 2-step process. The first step is to complete and send the coversheet. The second step allows you to either send (attach) a file or a short message that you type directly into the form. You simply mouse click onto the hyperlink entitled: "Send a File or Brief Comment" on the ECFS Home Page.

In completing the transmittal screen, commenters should include their full name, (postal system) mailing address, and the applicable docket - in this case: 98-143. You may also submit an electronic comment by e-mail. The e-mail comment filing instructions are available by sending an e-mail to: ecfs@fcc.gov. Include the following words in the body of the message, "get form <your e-mail address>." A sample form and directions will be sent in reply.

The FCC prefers that the public utilize the ECFS system, but paper filings can continue. They should, however, be accompanied by computer diskettes. Parties who choose to file by paper must file an original and four

copies of each filing. All filings must be sent to the Commission's Secretary, Magalie Roman Salas, Office of the Secretary, Federal Communications Commission, 1919 M Street NW, Room 222, Washington, D.C. 20554.

Parties who choose to file by paper should also submit their comments on a diskette to: M. J. DePont, Public Safety and Private Wireless Division, Wireless Telecommunications Bureau, Room 8332, 2025 M Street NW, Washington, D. C. 20554. Such a submission should be on a 3.5-inch diskette formatted in an IBM compatible format using WordPerfect 5.1 for Windows or compatible software. The diskette should be accompanied by a cover letter and should be submitted in "read only" mode.

The diskette should be clearly labeled with your name, proceeding (WT Docket No. 98-143), type of pleading (comment or reply comment), date of submission, and the name of the electronic file on the diskette. The label should also include the following phrase "Disk Copy - Not an Original." Each diskette should contain only one party's pleadings, preferably in a single electronic file. In addition, commenters should also send diskette copies to the Commission's copy contractor, International Transcription Services, Inc., 1231 20th Street NW, Washington, D. C. 20037.

Alternative formats (computer diskette, large print, audio cassette and Braille) are available to persons with disabilities by contacting Martha Contee at telephone: (202) 418-0260, TTY: (202) 418-2555, or by e-mail to: mcontee@fcc.gov.

"COOKIES" YOUR MOTHER NEVER BAKED

PCs are interactive. That means data is sent back and forth between the user (you) and the website's remote server. Some can be automatically stored right on your hard drive for later use. In fact, it is very common.

So much misinformation exists on secret "cookie" files sent by remote servers to user PCs that it recently prompted the U.S. Government to issue an Information Bulletin.

Internet Cookies

The popular rumors about web cookies describe them as programs that can scan your hard drive and gather information about you including: passwords, credit card numbers, and a list of the software on your computer. Not true! A cookie is a short piece of data, not executable code, which is sent from a web server to a web browser when that browser visits the server's site. It is simply stored and cannot do anything to your machine.

Whenever you are surfing a website, your web browser secretly sends a copy of a previously sent cookie back to the server. Both Netscape and Microsoft browsers have this feature incorporated.

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A server cannot find out your name or e-mail address, or anything about your computer using cookies. And they are only sent back to the website that originally sent them to the browser and to no one else. The vulnerability of systems to damage or snooping by using web browser cookies is essentially nonexistent. Cookies can only tell a web server if you have been there before and can pass short bits of information (such as a user number) from the web server back to itself the next time you visit.

You can turn off "cookie collecting" but blocking all cookies prevents some online services from working. Also, preventing your browser from accepting cookies does not make you an anonymous user. The IP address of your Internet service provider remains accessible.

Temporary and persistent cookies

Most cookies last only until you quit your browser and then are deleted. A second type of cookie known as a persistent cookie has an expiration date and is stored on your disk until that date. A persistent cookie can be used to track a user's browsing habits by identifying him whenever he returns to a site. Information about where you come from and what web pages you visit already exists in a web server's log files and could also be used to track users browsing habits, cookies just make it easier. Only persistent cookies can be used to track a user at more than one site.

Many sites use cookies to eliminate the need for users to enter a user name and password every time they access their Website. A user ID (or the user name and the password) are stored in the Cookie file in plain text.

When a browser sends a request to a server, it includes its IP address, the type of browser you are using, and the operating system of your computer. This information is usually logged in the server's log file. No personal information can be sent to the website server.

One common use of cookies is to create customized home pages. Whenever you request your custom home page your cookies are sent along with the request to tell the server which items to display. Without cookies, a server would require you to identify yourself each time you visit the custom page so it knows what items to display. The server would also have to store the custom page settings for every visitor.

A less admirable use of cookies, and the one that is causing all the controversy, is its use as a device for tracking the browsing and buying habits of individual web users. On multiple client sites being serviced by a single advertising/marketing site, cookies can be used to track your browsing habits on all the client sites. If many web sites support the same advertising firm, that firm will be able to track your browsing habits from page to page within all the client sites. This information can be used to

infer the things you are interested in and to target advertising to you based on those inferences.

Parents (and supervisors) have also been known to check the cookie file periodically to see what the family (or employees) are doing in their spare time!

Examining Persistent Cookies On Your System

Persistent cookies are stored in different places on your system depending on which web browser and browser version you are using. Netscape stores all its persistent cookies in a single file named cookies.txt on the PC or magiccookie on the Macintosh. Both files are in the Netscape directory.

Internet Explorer stores persistent cookies in separate files named with the user's name and the domain name of the site that sent the cookie. The cookie files are stored in c:\WINDOWS\cookies or in c:\WINDOWS\profiles\cookies directories, where is replaced with the user's login name. In either case, you can delete any of these files you do not want to keep. You can open these files to see where they came from and what information they contain.

You can prevent any cookies from being sent to your system using the browser options. In Internet Explorer 4.0, choose the View, Internet Options command, click the Advanced tab and click the Disable All Cookie Use option. In Netscape 4.0, choose the Edit, Options command, click on Advanced and click the Disable Cookies option. After that, no cookies will be stored on your system. You will need to turn cookies back on if you want to use any online services that require them. You can also choose the option to prompt you before accepting a cookie, but at many sites you will be continually closing the warning dialog box.

Several companies are offering special software packages that work with your web browser to control who can send you a cookie. In these packages, you designate which sites can send you a cookie and which can not, alleviating the need to turn cookie use on-and-off by hand. If you want to use cookies in some instances and not in others, one of these packages may make things easier.

What's in the Cookie Jar?

Internet (Microsoft) Explorer browser users can easily examine all cookies saved on their computer by going to the following webpage <<http://www.cookiecentral.com/mim03.htm>> and clicking on the "Check cookies" button at the bottom. It will bring up the "C:\WINDOWS\Cookies" files. Clicking on the file icon will reveal the contents including the address of the site that sent you the cookie.

The following two excellent sites will tell you more than you really want to know about Internet "cookies" and how they are used: <<http://www.cookiecentral.com>> and <<http://www.junkbusters.com>>.